

REMARKS

In ¶ 2 of the Office Action, claims 1, 3 and 4 have been rejected under 35 U.S.C. § 112, first paragraph, as being unsupported by an enabling disclosure. The Applicants respectfully traverse this ground for rejection for the following reasons.

The Applicants disagree that identification of a specific 3M product by trade name is non-enabling. A person skilled in the art is able to readily contact 3M Company to obtain hydrophilic polymer melt additive containing FC-1296 or a substantial equivalent. In the event that this product is discontinued, the Applicants have also disclosed the ingredients in general terms, namely, "49-50 wt.% fluorochemical polymer, 49-50 wt.% hydrocarbon surfactant, and 0-1 wt.% residual organic fluorochemicals" [see Specification, p. 9, lines 15-17]. As seen in the datasheet submitted herewith (see Exh. A annexed hereto), 3M maintained the exact compositions of the fluorochemical polymer and of the hydrocarbon surfactant as trade secrets. Thus, the Applicants have disclosed all information available to them concerning the composition of the disclosed embodiment of the invention, and it is believed that the general description is sufficient to enable a person skilled in the art to practice the invention without undue experimentation.

In ¶ 4, the Examiner has further rejected claims 1, 3 and 4 have been rejected under 35 U.S.C. § 112, second

paragraph, as being indefinite for failing to define the term "hydrophilic polymer melt additive". The Applicants vigorously disagree that this term is indefinite. On the contrary, a person skilled in the art would readily understand that a "polymer melt" is melted polymer, that an "additive" is something added to that melted polymer, and that the adjective "hydrophilic" modifies the term "additive" to indicate that the additive imparts hydrophilicity (i.e., wettability) to the final product. This definition is amply supported by the Specification on page 8, lines 15-22, which paragraph reads as follows:

The addition of the hydrophilic polymer melt additive directly to the polymer host resin is accomplished at a range of concentration sufficient to form a compatible hydrophilic blend. The mechanism of hydrophilization of a hydrophobic polymer surface is based on the migration of some hydrophilic surface active molecules to the surface, which imparts hydrophilicity to the surface.

Consequently, the Applicants submit that the recited term "hydrophilic polymer melt additive" is not indefinite.

In ¶¶ 6 and 7 of the Office Action, claims 1, 3 and 4-6 stand rejected under 35 U.S.C. § 102(b) or (e) as being anticipated by either U.S. Patent No. 5,433,727 to Gagnon or U.S. Patent No. 6,132,849 to Gagnon, which contain common disclosure. The Applicants traverse these grounds of rejection for the following reasons.

Claim 1, as amended, recites a microporous polymeric film comprising a hydrophilic blend of a hydrophobic polymeric material and a hydrophilic polymer melt additive. In contrast, the Examples in either Gagnon patent cited by the Examiner comprise a microporous membrane that is coated with a solution of PVTFA via saturation treatment. The result is a "PVTFA shell formed on the external and internal pore surfaces" [col. 36, lines 63-64] of the microporous polymeric film. This is different than Applicants' claimed invention wherein the microporous polymeric film is a "blend" of polymer and hydrophilic additive. In Gagnon, the hydrophilic agent is a coating on the microporous film and is not blended into the film itself. Thus, claim 1 and claims 3 and 4 dependent thereon are not anticipated by either Gagnon reference.

In ¶ 8 of the Office Action, claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,326,391 to Anderson. The Applicants traverse these grounds of rejection for the following reasons.

The Anderson patent teaches a microporous film comprising a matrix of substantially water-insoluble thermoplastic organic polymer, finely divided substantially water-insoluble filler particles, and a network of interconnecting pores. In contrast, amended claim 1 recites that the microporous film does not comprise filler particles. In addition, none of the whiteness-retaining organics surfactants identified in column 1, lines 31-40, of Anderson

is suitable for use in a polymer melt blending and extrusion process because the identified agents have low thermal decomposition temperatures. As stated in column 2, lines 29-34, of Anderson: "It is therefore expected that organic surface active agents which, when incorporated into the batch prior to extrusion, are not very effective in retaining whiteness, will often be satisfactorily effective if applied topically after microporous material formation." Thus, the whiteness-retaining organic surfactants identified by Anderson do not constitute "hydrophilic polymer melt additives", as recited in claim 1. In view of the foregoing, amended claim 1 is not anticipated by Anderson and this rejection should be withdrawn.

In ¶ 10 of the Office Action, claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,132,849 to Gagnon. The Applicants submit that claim 2 is patentable at least for the same reasons (set forth above) that claim 1, on which claim 2 depends, is patentable over Gagnon.

In ¶ 11 of the Office Action, claim 15-24 and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,605,750 to Romano in view of U.S. Patent No. 6,132,849 to Gagnon and U.S. Patent No. 6,379,780 to Laney et al. Applicants traverse this ground of rejection for the following reasons.

The Romano patent discloses the application of an image-forming layer onto a microporous material of the type disclosed in the Gagnon patents. In other words, the underlying microporous polymeric film comprises a matrix of polymer and finely divided filler particles. Claims 15 and 34 have each been amended to clarify that the microporous polymeric film in Applicants' coated embodiments do not comprise filler particles. Thus, the Applicants submit that the subject matter recited in claims 15 and 34 is neither anticipated nor obvious in view of the Romano reference alone.

In combination with Romano, the Examiner cites Gagnon for teaching the use of PVA. However, since Romano already teaches the use of PVA binder in a coating (see column 14, line 36), the Applicants can see no motivation for combining the teaching of Gagnon with the teaching of Romano.

The Laney patent is cited by the Examiner solely for the teaching of forming voids in a layer of polyester by adding particles of inorganic filler such as silica and alumina. Since claims 15 and 34 explicitly recites the absence of such filler particles, the Applicants submit that the Examiner's reason for citing Laney has been removed.

In view of the foregoing, the Applicant submits that this application is now in condition for allowance. Reconsideration of the application and allowance of claims 1-6, 15-24, and 34 are hereby requested.